

Project Leader's Report

October - 2003



DMISE
DISPERSED MANAGEMENT
OF SOUTHERN ECOSYSTEMS

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Technology Transfer :

- Ken Outcalt attended the Big Thicket Science Conference held in Beaumont, TX and presented an invited paper, "Response of pine communities on the Kisatchie National Forest to mechanical chipping and fire."
- Sandra Rideout participated in an expert fire panel at the Enhancing the Southern Appalachian Forest Resource Symposium, Kanuga Conference Center, Hendersonville, NC, and presented "Fire in the Appalachians: Wildfire, people and the wildland urban interface." Co-presenters were Dr. David Van Lear of Clemson University, who spoke about the history of fire in the Appalachians, and Dr. Jim Vose, Coweeta Hydrologic Lab, who spoke on Appalachian fire ecology.
- Alex Clark attended the Wood Quality Workshop, held in Portland, OR, and presented a paper "The Wood

Quality Consortium-Its organization, objectives and accomplishments."

- Rick Reitz attended the Society of American Foresters Annual Meeting in Buffalo, NY and presented a technical session on the Community Advisor-Firewise program.
- Mac Callaham gave an invited presentation at the Entomological Society of America Annual Meeting in Cincinnati, OH. The talk was part of a symposium on using stable isotopes in applied entomological research.
- Callaham participated in a workshop where international experts on invasive earthworms discussed and organized a symposium on earthworm invasions to be held next summer at the International Colloquium on Soil Zoology. Paul Hendrix, UGA Institute of Ecology organized the workshop. Callaham was

Outreach Activities:

Five organized groups with a total of 85 people visited the Brender Forest during October. These groups included attendees of the Temporary Haul Road Design Workshop, three biology classes studying woodpeckers and use of prescribed burning, and a group attending the demonstration of the "Tree Hoe" machine that is to be used for pre-commercial thinning and site preparation.

Approximately 25 visitors stopped at the Brender Forest office for information and 89 people signed the register at the Hitchiti Interpretive Trail

Fall deer hunting began this month on the Brender Forest, including a hunt for the disabled, a buck only hunt, and an either sex, primitive weapon hunt. In these hunts, 250 deer were harvested on the Piedmont National Wildlife Refuge and the Brender Forest. An estimated 250 hunters participated.



Chief Dale Bosworth was the guest speaker in the Hartzog Lecture Series, sponsored annually by the Clemson University Department of Parks, Recreation and Tourism Management. The series began in 1980 with an endowment by William Everhart in the name of George B. Hartzog, Jr., Director of the National Park Service from 1964-1972. Chief Bosworth described four issues that threaten our National Forests: fire and fuels, invasive species, habitat fragmentation, and unmanaged recreation. Most of these topics have direct impact on the research of the work unit. The Chief met with members of the Uplands Ecology Team in an informal meeting after the lecture.

on the local organizing committee and served as a moderator for one of the breakout sessions (mitigation and management of invasions).

- A workshop on temporary haul roads was held at the Brender Demonstration Forest/Hitchiti Experimental Forest. This first workshop was to train the trainers, who will then instruct loggers on how to locate and construct temporary roads to better protect soil and water. According to the Georgia Forestry Commission, temporary roads present the greatest number of problems with BMP compliance during harvesting. Topics covered in this workshop were location and design using topographic maps, soil maps and other aids, as well as type and size of water control structures. Attendees laid out a haul road and then viewed a road previously constructed according to Best Management Practices.

Instructors were John Moore, Experimental Forest Manager; Tommy Carroll, Southeastern Wood Producers; Frank Greene, Georgia Forestry Commission; Ben Jackson, Georgia Extension Service; Dick Rightmeyer, soil scientist Chattahoochee-Oconee National Forest; and Nipper Bunn, logger from Forsyth.

- John Stanturf appeared on Timber Talk, broadcast on four radio stations in Arkansas. TimberTalk is an interview show on forestry issues hosted by Teddy Reynolds of Magnolia Forestry. Stanturf discussed his recent article on pine plantation productivity that appeared in the Journal of Forestry.

- The Joint Fire Science Program (JFSP) has selected the Uplands Ecology Team to be featured in the JFSP annual report to Congress. Research results and attainment will be among the highlights of the report. This team was honored earlier in the year for having the most productive project funded by the JFSP.



Meetings / Reports :

- Tom Waldrop, Ken Outcalt, and Deb Kennard attended the annual meeting of the Science and Management Integration Committee of the National Fire and Fire Surrogate Study held at Sequoia National Park, CA. Major topics of discussion included plans for future funding and interdisciplinary analyses at the site and national level. A highlight of the week was the field trip to see Fire and Fire Surrogate Study plots at the Sequoia National Park.



Tom Waldrop, Ken Outcalt, and Deb Kennard examining a young giant Sequoia.

- Gary Achtemeier met with John Blake, Savannah River Site, to discuss the smoke management research and the 2004 burn season. Plans include collection of 3mm radar data by the University of Massachusetts to characterize vertical smoke distribution. These data will be compared to ancillary aircraft and balloon data to better estimate the amount of smoke that goes above the mixing layer.

"Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts."

—Rachel Carson

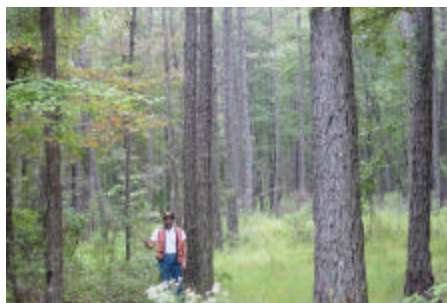
Tom Waldrop at the re-named General Sherman Tree, Sequoia National Park, CA.

↓ Funding :

• Ken Outcalt attended the Mountain Longleaf Conference at Jacksonville State College in Alabama. The Longleaf Alliance sponsored the meeting, which focused on longleaf pine management and restoration on the recently created Mountain Longleaf National Wildlife Refuge, formerly Ft. McClellan Army Post. The meeting provided an opportunity for Outcalt to discuss longleaf pine restoration with interested managers and biologists from around the region.

• John Stanturf attended the SRS Management Team Meeting in Huntsville, AL. He sent a summary of the meeting to unit staff.

• The Interagency Fire and Air Group 2004 meeting will be held in Athens in May 2004 at the request of Al Riebau, Washington Office. Gary Achtemeier will host the meeting and the group will tour SHRMC. Lynne Breland is making the arrangements.



Ken Outcalt with control (left) and burned (right) plots on Kisatchie National forest.

• Gary Achtemeier received funding (\$12,000) from the Fish and Wildlife Service (Piedmont National Wildlife Refuge) to deliver a turnkey smoke management system using PB-Piedmont, including training.



↓ Visitors :

• Dr. Geoff Downes with CSIRO Forestry and Forest Products, Australia, visited Alex Clark on October 8 to discuss the wood quality research Alex and the Wood Quality Consortium are conducting.



Bruce Jewell visited Athens to conduct performance evaluations.

↓ Personnel News :

• Kim Crider has been accepted into the Graduate School at the University of Montana in Missoula. Kim is funded under the Scientist Recruitment Initiative of the Forest Service. Elizabeth Crone will be her major professor.

• Cynthia Fowler attended S130/S190 Wildland Firefighter Training at the Texas Wildfire Academy from October 16-18.



Cynthia Fowler (far right) with fire crew at training in Texas.



Nice fire, Cynthia. You got the hang of the drip torch.



Cynthia Fowler is ready for work.

GPRA Accomplishments:

Category	FY 2002 Total	FY 2003 To Date
Number of Refereed Journal Publications	24	4
Number of Non-Refereed Publications (include abstracts)	50	7
Number of Publications (refereed + non-refereed)	74	11
Number of Tours	66	6
Number of Short Courses/Training	8	5
Number of Invited Presentations to Scientific Organizations	8	4
Number of Invited Presentations to Lay Organizations	45	3
Volunteer Presentations to Scientific Organizations (non-GPRA)	27	7
Number of Technology Transfer Activities (other than above)	135	16
Outside Funding	\$1,955,455	\$13,000

News from around the Region :

- The Southern Wildland Urban Interface Network (SWUINET) was created for those interested in the diverse spectrum of wildland-urban interface issues, particularly those affecting the 13 Southern States. It is also an opportunity to learn about similarities and differences of the wildland-urban interface in other regions of the U.S. The purpose is to exchange ideas and information, share opportunities for funding and collaborative projects, facilitate networking, and build a base of information about the wildland-urban interface in the South. Visit their website to subscribe: <http://www.interfacesouth.org/swuinet.html>.

- A new report from The Wilderness Society, “The wildland fire challenge: Focus on reliable data, community protection, and ecological restoration,” evaluates the quality of information feeding Federal wildland fire policy and assesses the challenge with a community protection focus. The report outlines the first steps to prioritize where fuels reduction efforts are needed, and delivers a plan to restore fire-reliant forests. The report’s findings are centered on three areas: the need for more reliable data, community protection as a priority, and restoring forests and reintroducing fire. The report criticizes the information available for decision-making and suggests that millions of acres may be candidates for restoration of natural fire regimes. The report presents maps of protection zones, totaling 11 million acres, around communities at greatest risk from wildland fire. The report is available from the Wilderness Society; <http://www.wilderness.org>.

- The XII World Forestry Congress, recently held in Québec City from September 21 to 28, 2003, provided more than 4,000 people from more than 140 countries with the opportunity to agree on principles to adopt and actions to enact in order to ensure the future of forests the world over. The program of the Congress offered 58 sessions, 114 ecoregional round tables, 6 debates on the leading issues of our time, 25 technical visits, 325 posters, 110 side events, an exhibition showcasing 150 organizations and companies, as well as an “Open to the General Public” day. The Final Statement of the Congress is available on the official XII World Forestry Congress website at: <http://www.cfm2003.org/en/index.php>. The main Volume of the Congress proceedings is currently being readied for publication and will be mailed to all participants as soon it is brought out. A CD-Rom that includes all three volumes previously distributed during the Congress as well as the main volume will accompany this publication. (Source: World Forestry Congress Newsletter).

- The Ontario Ministry of Natural Resources has published a “Forest management guide for natural disturbance pattern emulation” that provides direction to forest managers on mimicking natural fire disturbance patterns and events at the landscape and stand level during planning and implementation of forest harvest and renewal prescriptions. The Guide is designed to change the pattern of forest harvesting at the landscape and stand level, and to make forest management activities better simulate the way fire disturbs the forest. In so doing, it is more likely that ecological functions associated with natural disturbance patterns will be maintained. The Guide describes a process to provide for a range of sizes of harvest areas, which

better simulate the disturbance pattern produced naturally on the landscape. The guide also provides direction on retaining residual trees in harvest areas and addresses operational definitions for clearcuts. Copies of the Guide are available for \$15 CDN from the Ministry or a pdf can be downloaded at: <http://ontariosforests.mnr.gov.on.ca/publications.cfm>

- Foreign travelers in Atlanta will be the first to test the new entry/exit system for tracking visitors to the United States. Homeland Security Department officials will conduct a pilot test of the technologies used for entry and exit in the U.S. Visitor and Immigrant Status Indicator Technology (US-VISIT) system at Hartsfield Atlanta International Airport. Officials plan to have the entry technology implemented at 115 airports and 14 seaports by January 2004, with the exit systems running at up to 30 of the top airports, which cover 95 percent of the air traffic. Using the new system, a border inspector will scan two fingerprints from each visitor and take a digital picture. This is in addition to the current process of scanning visa documents and asking questions about the traveler’s stay — questions that left much of the process up to the inspector’s discretion. For the first time, the inspector will be able to verify a person’s identity by reviewing a digital photo from the State Department taken at the time of visa issuance with the photo on the person’s visa and the person. The traveler’s data is then checked against terrorist watch lists and the inspector is alerted as to whether there was a match with a name on the list or the passenger was cleared. ***Officials expect the procedure to add only a few seconds to the traveler’s inspection process*** [emphasis added, with a note of incredulity—Ed.]. The exit system

includes a kiosk where a traveler will follow prompts to scan their travel documents and fingerprints before boarding a plane to leave the country.

(Source: *Federal Computer Week*)

- High-resolution satellite images of the California wild fires are available to the public and media for free at http://www.spaceimaging.com/gallery/2003_fires. The IKONOS satellite took images of the burned area along I-15 in San Bernardino, CA, on Tuesday, Oct. 28 while orbiting 423 miles above the Earth. The images show billowing plumes of cloud-like smoke near the town of Devore and around Arrowhead and Gregory lakes in the San Bernardino area approximately 80 miles east of Los Angeles. Near-infrared sensors acquired some of the images. In these images the bright red areas actually show green or living vegetation. The blackened or charred areas in the satellite images show areas that have been burned by the wildfire. In one image, IKONOS has captured flames burning the forest near I-15 and I-215.

(Source: *PRNewswire*)

- Ball Aerospace & Technologies Corp. has been awarded a contract to develop system architecture for the next generation Geostationary Operational Environmental Satellite (GOES-R) system, planned for launch in 2012. The GOES satellite system provides imagery and associated data used to predict weather and to monitor the environment. The GOES satellites provide critical data used by forecasters at the National Weather Service to predict the weather and monitor many aspects of the environment. From their geosynchronous orbits, these satellites

continuously observe the Earth, tracking routine weather patterns as well as the development of severe weather such as hurricanes and tornadoes. The GOES data are increasingly important to forecasters as they strive to improve the reliability of weather and climate predictions.

(Source: *PRNewswire-FirstCall*)

- Fountain Investments Inc. will acquire approximately 168,000 acres of timberlands in west-central Tennessee from Weyerhaeuser Company. Weyerhaeuser will use after-tax proceeds totaling approximately \$65 million for debt repayment. The sale is expected to close in fourth quarter 2003. Earlier this year, Weyerhaeuser announced its intention to sell approximately 344,000 acres of timberlands in Tennessee and North and South Carolina. The sale process in the Carolinas is expected to conclude later this year. Weyerhaeuser, one of the world's largest owners of merchantable softwood timber, added 1.7 million acres to its portfolio with the Willamette acquisition. The company now owns or manages approximately 7.6 million acres in the United States. Fountain Investments is a land and timber company based in Florida.

(Source: *BUSINESS WIRE*)



Fires near San Diego.

Publications :

Dagley, Christa M. and O'Hara, Kevin L. 2003. Potential for old forest restoration and development of restoration tools in Coast Redwood: A literature review and synthesis. 72 p. Report to the Save-The-Redwoods League; download from their website <http://www.savetheredwoods.org/>

*Harrington, T.B., **Dagley, C.M., Edwards, M.B.** 2003. Above- and belowground competition from longleaf pine plantations limits performance of reintroduced herbaceous species. *Forest Science* 49 (5): 681-695.

Liu, Yongqiang. 2003. Prediction of monthly-seasonal precipitation using coupled SVD patterns between soil moisture and subsequent precipitation. *Geophysical Research Letters*, 30(15): 1827.

Outcalt, Kenneth W. 2003. Conversion of loblolly pine back to native longleaf in the southern USA. In Hansen, Jörg, Spiecker, Heinrich, von Teuffel, Konstantin, editors. "The question of conversion of coniferous forests." *Berichte Freiburger Forstliche Forschung* Heft 47, p. 10. [Abstract]

***Outcalt, K. W.** 2003. Developing management options for longleaf communities of the Gulf Coastal Plain. Proceedings of Fourth Longleaf Alliance Regional Conference. Longleaf Alliance Report No. 6: 126-129.

Schwendenmann, Luitgard, Veldkamp, Edzo, Brenes, Tania, **O'Brien, Joseph J.**, Mackensen, J. 2003. Spatial and temporal ~~variation in soil C~~ flux in an old-growth neotropical rain forest, La Selva, Costa Rica. *Biogeochemistry* 64: 111-128.

Stanturf, J.A. 2003. Promises and pitfalls of reference wetlands in forested ecosystem restoration 12th World Forestry Congress [Poster].

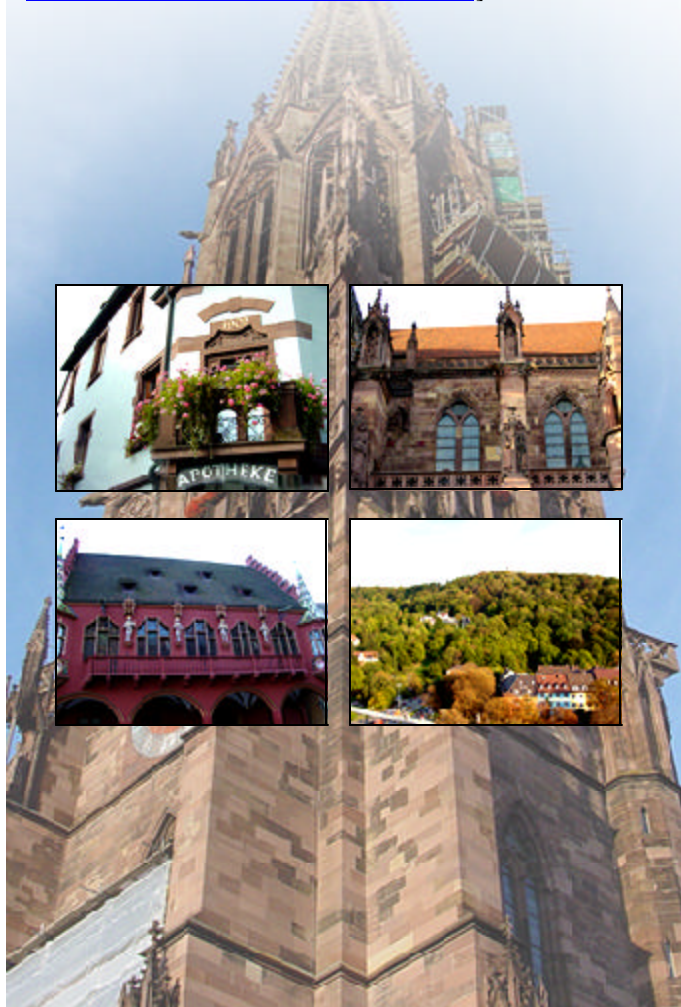
Stanturf, J.A. and Madsen, P. 2003. Temperate forest restoration. 12th World Forestry Congress [Poster].

Publications :

Stanturf, John and Madsen, Palle. 2003. It's not just semantics: Why clear communication matters. In Hansen, Jörg, Spiecker, Heinrich, von Teuffel, Konstantin, editors. "The question of conversion of coniferous forests." *Berichte Freiburger Forstliche Forschung* Heft 47, p. 29. [Abstract]

***Stanturf, J.A.**, Kellison, R., Broerman, F.S., Jones, S.B. 2003. Innovation and forest industry: Domesticating the pine forests of the southern United States, 1920-1999. Communication Across the Forest Science / Policy Interface - Special issue edited by John A. Parrotta and Jose J. Campos Arce. *Forest Policy and Economics* 5(4): 407-419.

Stanturf, John A. and Zhang, Daowei. 2003. Plantation forests in the US, past present and future. In Proceedings 12th World Forestry Congress, vol. B: Forests for the Planet p. 41 [Abstract]. [Full paper available at FAO website: <http://www.fao.org/DOCREP/ARTICLE/WFC/XII/0325-B1.HTM>]



Sights from Freiburg, Germany, location of the IUFRO Conference on Conversion of Conifer Forests to Broadleaves, attended by Ken Outcalt and John Stanturf.

Upcoming Events :

2003

- Nov 2-6** Soil Science Society of America annual meeting, Denver, CO
- Nov 3-7** Invasive Plants in Natural and Managed Systems: Linking Science and Management and 7th International Conference on the Ecology and Management of Alien Plant Invasions, Ft. Lauderdale, FL
<http://esa.org/ipinams-mapi7/abstractcall.htm>
- Nov 4-6** SAMAB Fall Conference, Asheville, NC.
<http://samab.org/Conf/Conf03/conf03.html>
- *Nov 6** Financial management training, Asheville; Janet Revell to attend
- Nov 13** Wood Quality consortium annual fall meeting in Athens, GA. Alex Clark will attend and make a presentation.
- Nov 16-19** National Fire Risk Assessment Conference, Portland, OR.
- Nov 16-20** Second International Congress On Wildland Fire Ecology And Fire Management, in conjunction with the Fifth Symposium on Fire and Forest Meteorology. <http://www.ametsoc.org>
- Nov 18-19** Southern forests sustainability first workshop, Charleston SC <http://sustainableforests.net>
- Nov 19-22** Society for Ecological Restoration 15th International Conference, Austin, TX (note new dates).
<http://www.ser.org>
- Nov 24-26** Introduction of broadleaf species for sustainable forest management, international conference sponsored by SUSTMAN project at the University of Ulm; to be held in Reimsburg, Germany,
<http://www.sustman.de>
- Nov 27-Dec 5** IEA Short Rotation Bioenergy (Task 30) meeting, New Zealand and Australia
<http://www.shortrotationcrops.com/events.htm>
- Dec 8-10** Bioenergy australia 2003, Sydney; Stanturf to present paper;
<http://www.conferenceaction.com.au/current/Bioenergy2003RregDoc.pdf>

2004

- Feb 2-3** 2nd Annual Western Gulf Forest Soils Tour, Alexandria, LA

Mar 2-4	Southern Research Station All Scientists Meeting	Sep 3-7	European Forest Institute (EFI) Annual Meeting, Bangor, Wales (UK).
*Mar 3-5	National Fire Plan and Wildland Fire Conference 2004, Reno, NV http://www.iafc.org/pdf/conf/WF04_attendee.pdf	Sep 12-16	IUFRO Conference Regenerating Mountain Forests, Kloster Seeon, Bavaria, Germany; http://www.forst.tu-muenchen.de/events/rmf2004/index_en.html
Mar 17-19	14th central Hardwood forest conference, wooster, OH	*Oct 1-7	The National Wilderness Summit and Expo will be held, Denver, CO; http://www.wilderness.net/40th
*May 3-7	12th meeting of the International Boreal Forest Research Association, "Climate-Disturbance Interactions in Boreal Forest Ecosystems", Fairbanks, Alaska http://www.lter.uaf.edu/ibfra/default.cfm	*Oct 2-6	Society American Foresters Annual Meeting, held jointly with Canadian Institute of Forestry, Edmonton, Alberta.
*May 4-5	AF&PA's Agenda 2020 Wood and Wood Composites Task Group—formerly the Committee on Research Evaluation (CORE)—meeting, Forest Products Lab in Madison, WI	Oct 31-Nov 3	Soil Science Society of America Annual Meeting, Seattle, WA.
*May 18-20	Interagency Fire and Air Group meeting, Athens; contact Gary Achtemeier (gachtemeier@fs.fed.us) for information	2005	
*Jun 14-18	IUFRO Division 1 - Silviculture Conference, CIRADForet, in Montpellier, France. <i>Note date change</i>	Aug 8-13	IUFRO World Congress, Brisbane, Australia. Stanturf to attend. http://www.iufro2005.com
*Jun 24-26	Greenhouse gas emissions and abrupt climate change: Positive options and robust policy, Paris, France; dates and location tentative; http://www.iiasa.ac.at	Aug/Sep	Society for Ecological Restoration 17th International Conference, Zaragoza, Spain.
Jun 27-Jul 2	First Agroforestry World Congress, Orlando, FL http://conference.ifas.ufl.edu/wca/#background	*Oct 19-23	Society American Foresters Annual Meeting, Ft. Worth, TX
Jul 25-31	7th INTECOL International Wetlands Conference, Utrecht, The Netherlands. http://www.bio.uu.nl/INTECOL	Nov 6-10	Soil Science Society of American Annual Meeting, Salt Lake City, UT
Aug 15-20	Large-Scale Experiments for Sustainable Forestry: Balancing Ecosystem Values; International IUFRO Workshop, Portland, OR. <i>Contact Charley Peterson: cepeter@fs.fed.us</i>	TBD	5th International Conference on Forest Vegetation Management, IUFRO Research Group 1.13.00 Forest Vegetation Management. Corvallis, Oregon, USA Contact: Robin Rose , robin.rose@orst.edu .
*Sep 1-2	Forest IT 2004 Exhibition and Congress, Jyväskylä, Finland; http://www.ForestIT.net		

SRS-4104 Project Leader's Report

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